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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,968	10/03/2000	Shinichi Morimoto	P/3156-18	4531

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EXAMINER

LIPMAN, JACOB

ART UNIT PAPER NUMBER

2134

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/677,968	Applicant(s) MORIMOTO, SHINICHI	
	Examiner Jacob Lipman	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3 and 5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDSs) submitted on 10/3/00 and 1/15/04 have not been fully considered by the examiner. The Japanese art was not translated nor did applicant attempt to explain why it was relevant.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a translation into English from a foreign document and are replete with grammatical, punctuation, and idiomatic errors. The examiner stresses that the punctuation errors, such as missing commas, leaves the claims difficult to understand clearly.

6. Claim 1 recites the limitation "the AP or APs" in line 5. There is insufficient antecedent basis for this limitation in the claim. The claims switch back and forth between the terms "AP" and "AP or APs". The claims should be clear and maintain the same term for the same item throughout.
7. Claims 4 and 15 recite the limitation " $(k - 1)$ " in line 4. It is unclear what happens when k is 1.
8. Claim 5 recites the limitation "key other than said n th encrypted key" in lines 8-9. Again, it is unclear what happens when k is 1, and there are no other keys.
9. Claims 5 and 7 recite the limitation "that effect" in line 17 and 9. There is insufficient antecedent basis for this limitation in the claims. The limitation of advising is also unclear here, as to how or what advising is happening. This limitation should be clarified throughout the claims (claim 9 line 9 etc.)
10. Claim 6 recites the limitation "said SV" in line 6. There is insufficient antecedent basis for this limitation in the claim. Again, like terms must be used for the same item.
11. Claim 11 recites the limitation "lumped STA encrypted key updating request" in line 8. There is insufficient antecedent basis for this limitation in the claim (unlike terms).
12. Claim 12 recites the limitation "the generated encrypted key" in line 13. There is insufficient antecedent basis for this limitation in the claim. It is unclear which of the keys that were generated this limitation is addressing.
13. Claim 14 recites the limitation "rate of one at a preset interval" in line 6. This limitation is unclear.

14. Claim 16 recites the limitation "using an optional encrypted key" in line 5. It is unclear what is optional here.

15. Claim 16 recites the limitation "the nth encrypted key" in line 5. There is insufficient antecedent basis for this limitation in the claim.

16. Claim 16 recites the limitation "stored and managed by said AP" in line 6. This seems to be a contradiction to claim 12 line 12, which recites that the SV stores and manages the key. Claim 18 and 19 are also rejected for this.

17. Claim 16 recites the limitation "the encrypted key" in line 8. It is unclear whether this is the nth key or a different key.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims 1-4 and 12-21, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Farley et al., in LAN Times Guide to Security and Data Integrity.

With regard to claims 1 and 12, Farley discloses a wireless LAN network (pages 285-286), in which data is encrypted (page 286 paragraph 2), where keys are generated, managed, and delivered to the APs and STAs (pages 219-221).

With regard to claims 2-4 and 13-15, computers load information bit-by-bit, and thus loading keys one at a time is inherent.

With regard to claims 16, 17, 19 and 20, it is inherent that the current key will be used until updated.

With regard to claims 18 and 21 Harvey discloses using the updated keys for communication (page 219).

Allowable Subject Matter

20. Claims 5-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

21. The following is a statement of reasons for the indication of allowable subject matter: While updating keys on a wireless LAN has been discloses, as outlined above, the system of claims 5-11, however, have not been disclosed, and are not seen to be obvious to one of ordinary skill in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Lipman whose telephone number is 703-305-0716. The examiner can normally be reached on 7:00 - 4:00 (M-Th).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL


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